

<110> Andrade-Gordon, Patricia
Darrow, Andrew
Qi, Jenson

<130> ORT-1032

<141>

<170> PatentIn Ver. 2.0

<211> 1110

<213> Homo sapiens

gaccacggcc ctgcgcccca gccaggcctg aggacatgag gcggccggcg gcggtgccgc 60

tcttgctgct gctgtgtttt gggcttcaga gggccaaggc agcaacagcc tgttgtcgcc 120

ccaggatgct gaacggaatg gtgggcgggc aggacaagca ggagggcgag tggccctggc 180

aagtcagcat ccagcgcaac ggaagccact tctgcggggg cagcctcatc gcggagcagt 240

gggtcctgac ggctgcgcac tgcttccgca acacctctga gacgtccctg taccaggctcc 300

tgctgggggc aaggcagcta gtgcagccgg gaccacacgc tatgtatgcc cgggtgaggc 360

aggtggagag caaccccctg taccagggca cggcctccag cgctgacgtg gccctggtgg 420

agctggaggc accagtgtccc ttcaccaatt acatcctccc cgtgtgctg cctgacccct 480
 cggatgatctt tgagacgggc atgaactgct ggggtcactg ctggggcagc ccagtgagg 540
 aagacctcct gcccgaaaccg cggatcctgc agaaactcgc tgtgcccata atcgacacac 600
 ccaagtgtcaa cctgctctac agcaaagaca ccgagt ttgg ctaccaa ccc aaaaccat ca 660
 agaatgacat gctgtgcgcc ggcttcgagg agggcaagaa ggatgctgc aagggcga ct 720
 cgggcggccc cctggtgtgc ctctgggtc agtcgtggct gcaggcggg gtgatcag ct 780
 ggggtgaggg ctgtgccgc cagaa ccgcc cagggtgtcta catccgtgtc accgcca cc 840
 acaactggat ccatcggatc atccc caaac tgcagt tcca gccagcagg ttgggcgg cc 900
 agaagtgaga ccccggggc caggagcccc ttgagcagag ctctgca ccc agcctgcc cg 960
 cccacaccat cctgctggtc ctcccagcgc tgctgttgca cctgtgagcc ccaccaga ct
 1020
 catttgtaaa tagcgtcct tcctccctc tcaaataccc ttatatttatt tatgtttctc
 1080
 ccaataaaaa ccagcctgt gtgccagctg
 1110

<210> 2

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

20200707 00000000

<400> 2

gccaggcctg agga catgag

20

<210> 3

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 3

tgcgctggat gctgacttgc

20

<210> 4

<211> 40

<212> DNA

<213> Artificial Sequence

2025-10-10 10:06:00

<220>

<223> Description of Artificial Sequence: Nested probe

<400> 4

ccaggatgct gaaccgaatg gtgggcgggc aggacacgca

40

<210> 5

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 5

aggatctaga ggagggcgag tggccctggc

30

<210> 6

<211> 30

20201009 09:00:00

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer

<400> 6

ggggtctaga cttctggcgc cccaaacctcg

30

<210> 7

<211> 290

<212> PRT

<213> Homo sapiens

<400> 7

Met Arg Arg Pro Ala Ala Val Pro Leu Leu Leu Leu Leu Cys Phe Gly

1

5

10

15

Ser Gln Arg Ala Lys Ala Ala Thr Ala Cys Gly Arg Pro Arg Met Leu

20

25

30

202010-9004001

Asn Arg Met Val Gly Gly Gln Asp Thr Gln Glu Gly Glu Trp Pro Trp

35

40

45

Gln Val Ser Ile Gln Arg Asn Gly Ser His Phe Cys Gly Gly Ser Leu

50

55

60

Ile Ala Glu Gln Trp Val Leu Thr Ala Ala His Cys Phe Arg Asn Thr

65

70

75

80

Ser Glu Thr Ser Leu Tyr Gln Val Leu Leu Gly Ala Arg Gln Leu Val

85

90

95

Gln Pro Gly Pro His Ala Met Tyr Ala Arg Val Arg Gln Val Glu Ser

100

105

110

Asn Pro Leu Tyr Gln Gly Thr Ala Ser Ser Ala Asp Val Ala Leu Val

115

120

125

202010-010702

Glu Leu Glu Ala Pro Val Pro Phe Thr Asn Tyr Ile Leu Pro Val Cys

130

135

140

Leu Pro Asp Pro Ser Val Ile Phe Glu Thr Gly Met Asn Cys Trp Val

145

150

155

160

Thr Gly Trp Gly Ser Pro Ser Glu Glu Asp Leu Leu Pro Glu Pro Arg

165

170

175

Ile Leu Gln Lys Leu Ala Val Pro Ile Ile Asp Thr Pro Lys Cys Asn

180

185

190

Leu Leu Tyr Ser Lys Asp Thr Glu Phe Gly Tyr Gln Pro Lys Thr Ile

195

200

205

Lys Asn Asp Met Leu Cys Ala Gly Phe Glu Glu Gly Lys Lys Asp Ala

210

215

220

Cys Lys Gly Asp Ser Gly Gly Pro Leu Val Cys Leu Val Gly Gln Ser

225

230

235

240

202010-010702

Trp Leu Gln Ala Gly Val Ile Ser Trp Gly Glu Gly Cys Ala Arg Gln

245

250

255

Asn Arg Pro Gly Val Tyr Ile Arg Val Thr Ala His His Asn Trp Ile

260

265

270

His Arg Ile Ile Pro Lys Leu Gln Phe Gln Pro Ala Arg Leu Gly Gly

275

280

285

Gln Lys

290

<210> 8

<211> 1130

<212> DNA

<213> Artificial Sequence

10041006.010702

<220>

<223> Description of Artificial Sequence: Fusion gene of

Protease T in a zymogen activation vector

<400> 8

gaattcacca ccatggacag caaagggttcg tcgcagaaat cccgcctgct cctgctgctg 60
 gtggtgtcaa atctactctt gtgccagggt gtggtctccg actacaagga cgacgacgac 120
 gtggacgcgg ccgctcttgc tgccccttt gatgatgatg acaagatcgt tgggggctat 180
 gctctagagg agggcgagtg gccctggcaa gtcagcatcc agcgcaacgg aagccacttc 240
 tgccgggggca gcctcatcgc ggagcagtgg gtctgacgg ctgcgcatg cttccgcaac 300
 acctctgaga cgtccctgta ccaggctctg ctgggggcaa ggcagctagt gcagccggga 360
 ccacacgcta tgtagcccc ggtgaggcag gtggagagca accccctgta ccaggggcag 420
 gcctccagcg ctgacgtggc cctggtggag ctggaggcac cagtgccctt caccaattac 480
 atctccccg tgtgcctgcc tgaccctcg gtgatctttg agacgggcat gaactgctgg 540
 gtcactggct ggggcagccc cagtaggaa gacctcctgc ccgaaccgcg gatcctgcag 600
 aaactcgctg tgccatcat cgacacccc aagtgaacc tgctctacag caaagacaac 660
 gagtttggt accaaccaa aaccatcaag aatgacatgc tgtgcgcgg cttcgaggag 720
 ggcaagaagg atgctgcaa gggcgactcg ggcggcccc tgggtgctc cgtgggtcag 780
 tcgtggctgc aggcgggggt gatcagctgg ggtgagggt gtgcccga gaaccgccca 840
 ggtgtctaca tccgtgtcac cgcaccac aactggatcc atcggatcat ccccaaactg 900

cagttccagc cagcgagggtt gggcggccag aagtctagac atcaccatca ccatcactag 960

cggcgcgttc cctttagtga gggttaatgc ttcgagcaga catgataaga tacattgatg

1020

agtttgacaa aaccacaact agaatgcagt gaaaaaatg ctttatttgt gaaatttggtg

1080

atgctattgc tttatttgta accattataa gctgcaataa acaagttgac

1130

<210> 9

<211> 315

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Fusion Protein

of Protease T in a zymogen activation construct

<400> 9

Met Asp Ser Lys Gly Ser Ser Gln Lys Ser Arg Leu Leu Leu Leu Leu

1

5

10

15

Val Val Ser Asn Leu Leu Leu Cys Gln Gly Val Val Ser Asp Tyr Lys

2024-10-05 10:00:00

20

25

30

Asp Asp Asp Asp Val Asp Ala Ala Ala Leu Ala Ala Pro Phe Asp Asp

35

40

45

Asp Asp Lys Ile Val Gly Gly Tyr Ala Leu Glu Glu Gly Glu Trp Pro

50

55

60

Trp Gln Val Ser Ile Gln Arg Asn Gly Ser His Phe Cys Gly Gly Ser

65

70

75

80

Leu Ile Ala Glu Gln Trp Val Leu Thr Ala Ala His Cys Phe Arg Asn

85

90

95

Thr Ser Glu Thr Ser Leu Tyr Gln Val Leu Leu Gly Ala Arg Gln Leu

100

105

110

Val Gln Pro Gly Pro His Ala Met Tyr Ala Arg Val Arg Gln Val Glu

115

120

125

202070-00000000

Ser Asn Pro Leu Tyr Gln Gly Thr Ala Ser Ser Ala Asp Val Ala Leu

130

135

140

Val Glu Leu Glu Ala Pro Val Pro Phe Thr Asn Tyr Ile Leu Pro Val

145

150

155

160

Cys Leu Pro Asp Pro Ser Val Ile Phe Glu Thr Gly Met Asn Cys Trp

165

170

175

Val Thr Gly Trp Gly Ser Pro Ser Glu Glu Asp Leu Leu Pro Glu Pro

180

185

190

Arg Ile Leu Gln Lys Leu Ala Val Pro Ile Ile Asp Thr Pro Lys Cys

195

200

205

Asn Leu Leu Tyr Ser Lys Asp Thr Glu Phe Gly Tyr Gln Pro Lys Thr

210

215

220

Ile Lys Asn Asp Met Leu Cys Ala Gly Phe Glu Glu Gly Lys Lys Asp

202070" 30074007

225 230 235 240

Ala Cys Lys Gly Asp Ser Gly Gly Pro Leu Val Cys Leu Val Gly Gln

245 250 255

Ser Trp Leu Gln Ala Gly Val Ile Ser Trp Gly Glu Gly Cys Ala Arg

260 265 270

Gln Asn Arg Pro Gly Val Tyr Ile Arg Val Thr Ala His His Asn Trp

275 280 285

Ile His Arg Ile Ile Pro Lys Leu Gln Phe Gln Pro Ala Arg Leu Gly

290 295 300

Gly Gln Lys Ser Arg His His His His His His

305 310 315

202010 800400T